AMENDMENT

In the Claims:

Please cancel claims 2, 4-6, 9-12, 20, 22-24, 27-30 and 36-67

Please amend the following pending claims:

B1 Sub C1

1. (Amended) A method for changing acoustic reflectivity of an ultrasound target, the method comprising (1) administering to the target, a nongaseous emulsion comprising nanoparticles that comprise a liquid fluorocarbon which binds to the target and produces a change in acoustic reflectivity with a change in temperature and (2) changing the temperature of the bound emulsion to produce a measurable change in acoustic reflectivity of the target.

B2

3. (Amended) The method according to claim 1 wherein the fluorocarbon is perfluorooctane.

B3 Sub C2

7. (Amended) The method according to claim 1 wherein the nanoparticles are encapsulated with a lipid surfactant which comprises a ligand that binds to said target.

8. (Amended) The method according to claim 1 wherein the emulsion further comprises a biologically active agent.

B4 Sub C3

13. (Amended) The method according to claim 1 wherein changing the temperature comprises energizing the bound emulsion to increase temperature of the bound emulsion and enhance acoustic reflectivity of the target.

14. The method according to claim 13 wherein the energizing is performed by generating energy from ultrasound, shortwave, microwave, magnetic radiation, electromagnetic energy or a combination thereof.

15. (Amended) The method according to claim 1 wherein changing the temperature comprises reducing the temperature of the bound emulsion to produce a measurable decrease in acoustic reflectivity of the target.

16. (Amended) The method according to 15 wherein reducing the temperature is performed as part of cryotherapy or heart bypass surgery.

17. (Amended) The method according to claim 1 wherein changing the temperature comprises changing the temperature of the bound emulsion by at least 5°C.

18. (Twice Amended) A method for measuring enhanced acoustic reflectivity of an ultrasound target, the method comprising (1) administering to the target, a nongaseous emulsion comprising nanoparticles that comprise a liquid fluorocarbon which binds to the target and produces a change in acoustic reflectivity with a change in temperature and (2) changing the temperature of the bound emulsion to produce a measurable change in acoustic reflectivity of the target, and (3) detecting change in acoustic reflectivity of the target.

19. (Amended) The method according to claim 18 wherein detecting comprises
(a) measuring reflectivity prior to changing the temperature of the bound emulsion;
(b) measuring reflectivity after changing the temperature of the bound emulsion; and
(c) determining the change in reflectivity after changing the temperature of the bound emulsion compared to reflectivity prior to changing the temperature of the bound emulsion.

21. (Amended) The method according to claim 18 wherein the fluorocarbon is perfluorooctane.

25. (Amended) The method according to claim 18 wherein the nanoparticles are encapsulated with a lipid surfactant which comprises a ligand that binds to said target.

26. (Amended) The method according to claim 18 wherein the emulsion further comprises a biologically active agent.

B10 Sub C8

31. (Amended) The method according to claim 18 wherein changing the temperature comprises energizing the bound emulsion to increase temperature of the bound emulsion and enhance acoustic reflectivity of the target.

32. The method according to claim 31 wherein the energizing is performed by generating energy from ultrasound, shortwave, microwave, magnetic radiation, electromagnetic energy or a combination thereof.

33. (Amended) The method according to claim 19 wherein changing the temperature of the bound emulsion comprises reducing the temperature of the bound emulsion to produce a measurable decrease in acoustic reflectivity of the target.

34. (Amended) The method according to 33 wherein reducing the temperature is performed as part of cryotherapy or heart bypass surgery.

Sub C9

35. (Amended) The method according to claim 18 wherein changing the temperature comprises changing the temperature of the bound emulsion by at least 5°C.

Please add the following new claims:

B11

68. (New) The method according to claim 7 wherein the ligand is a polypeptide, a peptidomimetic, a polysaccharide, a lipid, or a nucleic acid.

Sub C10

69. (New) The method according to claim 68 wherein the ligand is at least a portion of an antibody.

70. (New) The method according to claim 25 wherein the ligand is a polypeptide, a peptidomimetic, a polysaccharide, a lipid, or a nucleic acid.

Sub C11

71. (New) The method according to claim 70 wherein the ligand is at least a portion of an antibody.